

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR RESOURCES

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Block Island Power Co.

PERMIT NO. RI-19-02

(Expiration date: June 14, 2007)

Pursuant to the provisions of Air Pollution Control Regulation No. 29, this operating permit is issued to:

Block Island Power Co. 100 Ocean Ave P.O. Box 518 Block Island, RI 02807

This permit shall be effective from the date of its issuance. All terms and conditions of the permit are enforceable by EPA and citizens under the federal Clean Air Act, 42 U.S.C. 7401, et seq., unless specifically designated as not federally enforceable.

Stephen Majkut, Chief Office of Air Resources	Date of issuance: 06/14/02

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SECTION I. SOURCE SPECIFIC CONDITIONS

A. Requirements for Emissions Unit G022

The following requirements are applicable to:

 Emission unit G022 (Engine No.22), which is a 1961 HP Caterpillar Internal Combustion Engine – Generator Set, Model No. 3512B, which burns diesel fuel. Emission unit G022 is equipped with air pollution control device C001, which is a Clean Diesel Technology selective catalytic reduction (SCR) system, Model No. AIRS 2000. Urea is used as the reagent in C001.

1. Emission Limitations

- a. Nitrogen Oxides (as Nitrogen Dioxide (NO₂))
 - (1) The concentration of nitrogen oxides discharged to the atmosphere from G022 shall not exceed 70 ppmv, on a dry basis, corrected to 15% O₂ (1-hour average). [Approval Nos. 1492 & 1547(A)(1)(a)]
 - (2) The emission rate of nitrogen oxides discharged to the atmosphere from G022 shall not exceed 3.10 lbs per hour. [Approval Nos. 1492 & 1547 (A)(1)(b)]
 - (3) Emissions of nitrogen oxides generated from G022 shall be treated by C001 and reduced by 90% before discharge to the atmosphere. [Approval Nos. 1492 & 1547(A)(1)(c)]
- b. Carbon Monoxide (CO)

The emission rate of carbon monoxide from G022 shall not exceed 2.72 gr/bhp-hr or a maximum of 11.7 lbs per hour, whichever is more stringent. [Approval Nos. 1492 & 1547(A)(2)]

c. Total Nonmethane Hydrocarbons (NMHC)

The emission rate of total nonmethane hydrocarbons from G022 shall not exceed 0.37 gr/bhp-hr or a maximum of 1.60 lbs per hour, whichever is more stringent. [Approval Nos. 1492 & 1547(A)(3)]

- d. Sulfur Dioxide (SO₂)
 - (1) All diesel fuel burned in G022 shall contain no more than 0.05 percent sulfur by weight. [Approval Nos. 1492 & 1547 (A)(4)(a); (B)(2)]
 - (2) The emission rate of sulfur dioxide discharged to the atmosphere from

G022 shall not exceed 0.79 lbs per hour. [Approval Nos. 1492 & 1547 (A)(4)(b)]

e. Particulate Matter (PM)

The emission rate of particulate matter discharged from G022 shall not exceed 0.188 gr/bhp-hr or a maximum of 0.81 lbs per hour, whichever is more stringent. [Approval Nos. 1492 & 1547(A)(5)]

f. Ammonia (NH₃)

- (1) The concentration of ammonia discharged to the atmosphere from G022 shall not exceed 30 ppmv, on a dry basis, corrected to 15 percent O₂ (1-hour average). [Approval Nos. 1492 & 1547(A)(6)(a)]
- (2) The emission rate of ammonia discharged to the atmosphere from G022 shall not exceed 0.53 lbs per hour. [Approval Nos. 1492 & 1547 (A)(6)(b)]
- (3) The ammonia limitations in Conditions I.A.1.f.(1) and I.A.1.f.(2) shall be reviewed by the Office of Air Resources after the first complete catalyst life cycle. The permittee shall submit to the Office of Air Resources a report summarizing ammonia monitoring data for the first complete catalyst life cycle. This report shall be submitted at least 60 days prior to the end of the first complete catalyst life cycle. After completion of this review, the Department may establish a new lower ammonia slip limitation for the facility. Any new ammonia slip limitation shall be based on historical data obtained from this facility and shall provide for operational flexibility and an appropriate margin of compliance. Calculation of any new ammonia slip limitation shall be based on statistical methods, numerical methods or other appropriate analytical methodology that is deemed acceptable by the Department.

Nothing in this Condition shall preclude the Department from establishing a lower ammonia slip limitation if it determines that unreacted ammonia, either alone or in combination with other emissions, may be injurious to human, plant or animal life, cause damage to property or unreasonably interfere with the enjoyment of life and property. [Approval Nos. 1492 & 1547 (A)(6)(c)]

g. Opacity

Visible emissions from G022 shall not exceed 10% opacity except for a period or periods aggregating no more than three minutes in any one hour. This visible emission limitation shall not apply during startup. Engine startup shall be defined as the first five minutes of firing following the initiation of firing.

[Approval Nos. 1492 & 1547(B)(1)] Where the presence of uncombined water is the only reason for failure to meet this requirement, such failure shall not be a violation of this permit. [1.4]

2. Operating Requirements

- a. Urea shall be injected into C001 whenever the catalyst bed is at or above 600°F. [Approval Nos. 1492 & 1547(B)(6)]
- b. The SCR system shall be operated at all times that G022 is operating except for: [Approval Nos. 1492 & 1547(B)(5)(a-c)]
 - (1) engine startup; Engine startup shall be defined as the first five minutes of firing following the initiation of firing;
 - (2) engine shutdown; Engine shutdown shall be defined as the cessation of operation for any purpose; and
 - (3) periods of low loads where the engine exhaust temperature is less than 600°F. At all times, the permittee shall operate its facility so as to minimize the period of time that engine exhaust temperature is less than 600°F so as to maximize the use of C001.
- c. C001 shall be operated and maintained according to its design specifications and in a manner consistent with good air pollution control practices for minimizing emissions. [16.1]
- d. Malfunction means a sudden and unavoidable breakdown of process or control equipment. In the case of a malfunction of C001, all reasonable measures shall be taken to assure resumption of the designed control efficiency as soon as possible. In the event that the malfunction of C001 is expected or may reasonably be expected to continue for longer than 24 hours and if the permittee wishes to operate G022 at any time beyond that period, the Director shall be petitioned for a variance under Section 23-23-15 of the General Laws of Rhode Island, as amended. Such petition shall include, but is not limited to, the following: [Approval Nos. 1492 & 1547 (G)(1)(a-e), 16.2]
 - (1) Identification of the specific air pollution control system (i.e. C001) and source on which it is installed (i.e. G022);
 - (2) The expected period of time that the air pollution control system will be malfunctioning or out of service:
 - (3) The nature and quantity of air contaminants likely to be emitted during said period;
 - (4) Measures that will be taken to minimize the length of said period;

(5) The reasons that it would be impossible or impractical to cease the source operation during said period.

- e. The permittee may seek to establish that a malfunction of any air pollution control system that would result in noncompliance with any of the terms of this permit or any other applicable air pollution control rules and regulations was due to unavoidable increases in emissions attributable to the malfunction. To do so, the permittee must demonstrate to the Office of Air Resources that:
 - (1) The malfunction was not attributable to improperly designed equipment, lack of preventative maintenance, careless or improper operation or operator error;
 - (2) The malfunction is not part of a recurring pattern indicative of inadequate design, operation or maintenance;
 - (3) Repairs were performed in an expeditious fashion. Off-shift labor and overtime should be utilized, to the extent practicable, to ensure that such repairs were completed as expeditiously as practicable.
 - (4) All possible steps were taken to minimize emissions during the period of time that repairs were performed.
 - (5) Emissions during the period of time that the repairs were performed will not:
 - (a) Cause and increase in the ground level ambient concentration at or beyond the property line in excess of that allowed by Air Pollution Control Regulation No. 22 and any Calculated Acceptable Ambient Levels; and
 - (b) Cause or contribute to air pollution in violation of any applicable state or national ambient air quality standard.
 - (6) The reasons that it would be impossible or impractical to cease the source operation during said period.
 - (7) The permittee's actions in response to the excess emissions were documented by properly signed, contemporaneous operating logs or other relevant evidence.

This demonstration must be provided to the Office of Air Resources

within two working days of the time when the malfunction occurred and contain a description of the malfunction, any steps taken to minimize emissions and corrective actions taken.

The permittee shall have the burden of proof in seeking to establish that noncompliance was due to unavoidable increases in emissions attributable to the malfunction. [Approval Nos. 1492 & 1547(G)(2)(a-g)]

3. Monitoring Requirements

- a. Ammonia (NH₃)
 - (1) The permittee shall monitor ammonia emissions for the first complete catalyst life cycle. Ammonia emissions shall be measured using Conditional Test Method 27 (CTM-027) or another method approved by the USEPA and the Director. Ammonia emissions shall be monitored according to the following schedule:
 - (a) Ammonia emissions shall be measured during the initial performance testing required by Condition I.A.3.d and once every 2200 operating hours thereafter for the first 8800 hours of SCR system operation after start up.
 - (b) Thereafter, ammonia emissions shall be measured once every 1500 operating hours for the next 4500 operating hours.
 - (c) Thereafter, ammonia emissions shall be measured once every 750 operating hours until the SCR catalyst is replaced. [Approval Nos. 1492 & 1547(J)(1)(a c)]
- b. Emission unit G022 shall be equipped with a non-resetable elapsed time meter to indicate, in cumulative hours, the elapsed operating time. [Approval 1409(C)(1), Approval Nos. 1492 & 1547(C)(1)]
- c. Emission unit G022 shall be equipped with a kilowatt hour meter to indicate, in cumulative kilowatt hours, the power generated by the engine generator set. [Approval 1409(C)(2), Approval Nos. 1492 & 1547(C)(2)]
- d. The permittee shall install and operate a thermocouple to measure inlet temperature to C001. [Approval Nos. 1492 & 1547(C)(3)]
- e. The permittee shall install and operate a flowmeter on the urea supply line to monitor overall urea consumption. [Approval Nos. 1492 & 1547(C)(4)]
- f. The permittee shall install and operate a pressure gauge to monitor backpressure

at the inlet of C001. [Approval Nos. 1492 & 1547(C)(5)]

g. The permittee shall continuously monitor the inlet temperature to C001. [Approval Nos. 1492 & 1547(F)(8)]

4. Testing Requirements

a. Sulfur Dioxide

Compliance with the sulfur limitations contained in Conditions I.A.1.d.(1) of this permit shall be determined by the procedures referenced in Conditions II.U.2 of this permit.

b. Opacity

Test for determining compliance with the opacity limitations specified in Condition I.A.1.g of this permit shall be performed per 40 CFR 60, Appendix A, Method 9. Additionally, all observers must qualify as per 40 CFR 60, Appendix A, Method 9. [1.3.1, 1.3.2]

- c. Compliance with the emission limitations contained in Conditions I.A.1.(a f) shall be based on one-hour average concentrations. Initial performance testing shall consist of three–one hour test runs at a load typical of representative operation (75 80%) and one-one hour test run at a high load condition (90 100%) and a low load condition (50 60%). Compliance with the emission limitations must be demonstrated for each of the test runs. [Approval Nos. 1492 & 1547(D)(1)]
- d. Within 180 days of completing the installation of C001, initial performance testing shall be conducted on G022. Performance testing shall be conducted for nitrogen oxides, carbon monoxide, particulate matter, ammonia/urea and total nonmethane hydrocarbons.

Thereafter, emission testing shall be conducted annually to determine compliance with the nitrogen oxides emission limitations. Compliance shall be based on one hour average concentrations. Annual emissions testing for nitrogen oxides shall consist of three-one hour test runs at a load typical of representative operation (75 - 80%). Compliance with the emission limitations must be demonstrated for each of the test runs. [Approval Nos. 1492 & 1547 (E)(1), 27.5.5]

e. A stack testing protocol shall be submitted to the Office of Air Resources for review and approval prior to the performance of any stack tests. A copy of the stack testing protocol for the initial performance testing shall be sent to EPA for review and approval. The permittee shall provide the Office of Air Resources at least 60 days prior notice of any performance test. [Approval Nos. 1492 & 1547]

(E)(2), 27.5.7(b)

f. All test procedures used for stack testing shall be approved by the Office of Air Resources prior to the performance of any stack tests. [Approval Nos. 1492 & 1547(E)(3), 27.5.7(c)]

- g. The permittee shall install any and all test ports or platforms necessary to conduct the required stack testing, provide safe access to any platforms and provide the necessary utilities for sampling and testing equipment. [Approval Nos. 1492 & 1547(E)(4), 27.5.7(d)]
- h. All testing shall be conducted under operating conditions deemed acceptable and representative for the purpose of assessing compliance with the applicable emission limitation. [Approval Nos. 1492 & 1547(E)(5), 27.5.7(e)]
- i. A final report of the results of stack testing shall be submitted to the Office of Air Resources no later than 60 days following completion of the testing. [Approval Nos. 1492 & 1547(E)(6), 27.5.7(g)]
- j. All stack testing must be observed by the Office of Air Resources or its authorized representatives to be considered acceptable. [Approval Nos. 1492 & 1547(E)(7), 27.5.7(f)]

5. Recordkeeping Requirements

- a. The permittee shall record in an operating log, on an hourly basis, the inlet temperature to C001 and engine load. The permittee shall keep records of these determinations and provide such records to the Office of Air Resources or its authorized representative and EPA upon request. [Approval Nos. 1492 & 1547(F)(8)]
- b. The permittee shall record on a monthly basis, the pressure drop across C001. The permittee shall keep records of this determination and provide such record to the Office of Air Resources or its authorized representative and EPA upon request. [Approval Nos. 1492 & 1547(F)(9)]
- c. The permittee shall maintain properly signed, contemporaneous operating logs, or other relevant evidence to document actions during startup shutdown periods. [Approval Nos. 1492 & 1547(F)(10)]
- d. The permittee shall, on a monthly basis, no later than 10 days after the first of each month, determine and record the fuel usage for G022 and the urea consumption for the previous month. The permittee shall calculate and record a urea-to-fuel ratio using this data. The permittee shall keep records of these determinations and provide such records to the Office of Air Resources or its authorized representative and EPA upon request. [Approval Nos. 1492 &

1547(F)(5)]

e. The permittee shall, on a monthly basis, no later than 10 days after the first of each month, determine and record the hours of operation for G022 for the previous month. The permittee shall keep records of this determination and provide such records to the Office of Air Resources or its authorized representative and EPA upon request. [Approval No. 1409(F)(4), Approval Nos. 1492 & 1547(F)(3)]

f. The permittee shall, on a monthly basis, no later than 10 days after the first of each month, determine and record the kilowatt-hours generated for G022 for the previous month. The permittee shall keep records of this determination and provide such records to the Office of Air Resources upon request. [Approval No. 1409(F)(5), Approval Nos. 1492 & 1547(F)(4)]

6. Reporting Requirements

- a. The permittee shall notify the Office of Air Resources, in writing, of the date of actual start-up of G022, no later than fifteen days after such date. [Approval Nos. 1492 & 1547(F)(7)]
- b. The permittee shall notify the Office of Air Resources of any noncompliance with the terms of Section I.A. of this permit, in writing, within 5 days of the occurrence. [Approval Nos. 1492 & 1547(F)(12)]

7. Other Requirements

- a. To the extent consistent with the requirements of Section I.A. of this permit and applicable federal and state laws, the equipment shall be operated in accordance with the representation of the equipment in the preconstruction permit application, prepared by Levine Fricke dated 12 November 1999, including Addendum 1, 2 and 3. [Approval Nos. 1492 & 1547 (H)(1)]
- b. The emission limitations contained in Conditions I.A.1.(a f) shall not apply during engine startup/shutdown conditions and periods when the engine exhaust temperature is less than 600°F. Engine startup shall be defined as the first five minutes of firing following the initiation of firing. Engine shutdown shall be defined as the cessation of operation for any purpose. [Approval Nos. 1492 & 1547(H)(3)]
- c. At all times, including periods of startup, shutdown and malfunction, the permittee shall, to the extent practicable, maintain and operate the facility in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Office of Air Resources, which may include, but is not limited to, monitoring results,

opacity observations, review of operating and maintenance procedures and inspection of the source. [Approval Nos. 1492 & 1547(H)(6)]

B. Requirements for Emissions Unit G023

The following requirements are applicable to:

• Emission unit G023 (Engine No. 23), which is a 1648 HP Caterpillar Internal Combustion Engine – Generator Set, Model No. 3516B, which burns diesel fuel. Emission unit G023 is equipped with air pollution control device C003, which is a Clean Diesel Technology selective catalytic reduction (SCR) system, Model No. ARIS 2000. Urea is injected as the reagent in C003.

1. Emission Limitations

- a. Nitrogen Oxides (as Nitrogen Dioxide (NO₂))
 - (1) The concentration of nitrogen oxides discharged to the atmosphere from G023 shall not exceed 70 ppmv, on a dry basis, corrected to 15% O₂ (1-hour average). [Approval Nos. 1586 & 1587(A)(1)(a)]
 - (2) The emission rate of nitrogen oxides discharged to the atmosphere from G023 shall not exceed 2.99 lbs per hour. [Approval Nos. 1586 & 1587 (A)(1)(b)]
 - (3) Emissions of nitrogen oxides generated from G023 shall be treated by C003 and reduced by 90% before discharge to the atmosphere. [Approval Nos. 1586 & 1587(A)(1)(c)]
- b. Carbon Monoxide (CO)

The emission rate of carbon monoxide from G023 shall not exceed 3.42 gr/bhp-hr or a maximum of 12.43 lbs per hour, whichever is more stringent. [Approval Nos. 1586 & 1587(A)(2)]

c. Total Nonmethane Hydrocarbons (NMHC)

The emission rate of total nonmethane hydrocarbons from G023 shall not exceed 0.24 gr/bhp-hr or a maximum of 0.5 lbs per hour, whichever is more stringent. [Approval Nos. 1586 & 1587(A)(3)]

- d. Sulfur Dioxide (SO₂)
 - (1) All diesel fuel burned in G023 shall contain no more than 0.05 percent sulfur by weight. [Approval Nos. 1586 & 1587 (A)(4)(a), (B)(2)]
 - (2) The emission rate of sulfur dioxide discharged to the atmosphere from

G023 shall not exceed 0.58 lbs per hour. [Approval Nos. 1586 & 1587 (A)(4)(b)]

e. Particulate Matter (PM)

The emission rate of particulate matter discharged from G023 shall not exceed 0.13 gr/bhp-hr or a maximum of 0.48 lbs per hour, whichever is more stringent. [Approval Nos. 1586 & 1587(A)(5)]

f. Ammonia (NH₃)

- (1) The concentration of ammonia discharged to the atmosphere from G023 shall not exceed 30 ppmv, on a dry basis, corrected to 15 percent O₂ (1-hour average). [Approval Nos. 1586 & 1587(A)(6)(a)]
- (2) The emission rate of ammonia discharged to the atmosphere from G023 shall not exceed 0.44 lbs per hour. [Approval Nos. 1586 & 1587 (A)(6)(b)]
- (3) The ammonia limitations in Conditions I.B.1.f.(1) and I.B.1.f.(2) shall be reviewed by the Office of Air Resources after the first complete catalyst life cycle of C001. The permittee shall submit to the Office of Air Resources a report summarizing ammonia monitoring data for the first complete catalyst life cycle of C001. This report shall be submitted at least 60 days prior to the end of the first complete catalyst life cycle. After completion of this review, the Department may establish a new lower ammonia slip limitation for the facility. Any new ammonia slip limitation shall be based on historical data obtained from this facility and shall provide for operational flexibility and an appropriate margin of compliance. Calculation of any new ammonia slip limitation shall be based on statistical methods, numerical methods or other appropriate analytical methodology that is deemed acceptable by the Department.

Nothing in this Condition shall preclude the Department from establishing a lower ammonia slip limitation if it determines that unreacted ammonia, either alone or in combination with other emissions, may be injurious to human, plant or animal life, cause damage to property or unreasonably interfere with the enjoyment of life and property. [Approval Nos. 1586 & 1587 (A)(6)(c)]

g. Opacity

Visible emissions from G023 shall not exceed 10% opacity except for a period or periods aggregating no more than three minutes in any one hour. This visible emission limitation shall not apply during startup. Engine startup shall be defined as the first five minutes of firing following the initiation of firing.

[Approval Nos. 1586 & 1587(B)(1)] Where the presence of uncombined water is the only reason for failure to meet this requirement, such failure shall not be a violation of this permit. [1.4]

2. **Operating Requirements**

- a. Urea shall be injected into C003 whenever the catalyst bed is at or above 600°F. [Approval Nos. 1586 & 1587(B)(6)]
- b. The SCR system shall be operated at all times that G023 is operating except for: [Approval Nos. 1586 & 1587(B)(5)(a-c)]
 - (1) engine startup; Engine startup shall be defined as the first five minutes of firing following initiation of firing;
 - (2) engine shutdown; Engine shutdown shall be defined as the cessation of operation for any purpose; and
 - (3) periods of low loads where the engine exhaust temperature is less than 600°F. At all times, the permittee shall operate its facility so as to minimize the period of time that engine exhaust temperature is less than 600°F so as to maximize the use of C003
- c. C003 shall be operated and maintained according to its design specifications and in a manner consistent with good air pollution control practices for minimizing emissions. [16.1]
- d. Malfunction means a sudden and unavoidable breakdown of process or control equipment. In the case of a malfunction of C003, all reasonable measures shall be taken to assure resumption of the designed control efficiency as soon as possible. In the event that the malfunction of C003 is expected or may reasonably be expected to continue for longer than 24 hours and if the permittee wishes to operate G023 at any time beyond that period, the Director shall be petitioned for a variance under Section 23-23-15 of the General Laws of Rhode Island, as amended. Such petition shall include, but is not limited to, the following: [Approval Nos. 1586 & 1587 (G)(1)(a-e), 16.2]
 - (1) Identification of the specific air pollution control system (i.e. C003) and source on which it is installed (i.e. G023);
 - (2) The expected period of time that the air pollution control system will be malfunctioning or out of service;
 - (3) The nature and quantity of air contaminants likely to be emitted during said period;

- (4) Measures that will be taken to minimize the length of said period;
- (5) The reasons that it would be impossible or impractical to cease the source operation during said period.
- e. The permittee may seek to establish that a malfunction of any air pollution control system that would result in noncompliance with any of the terms of this permit or any other applicable air pollution control rules and regulations was due to unavoidable increases in emissions attributable to the malfunction. To do so, the permittee must demonstrate to the Office of Air Resources that:
 - (1) The malfunction was not attributable to improperly designed equipment, lack of preventative maintenance, careless or improper operation or operator error;
 - (2) The malfunction is not part of a recurring pattern indicative of inadequate design, operation or maintenance;
 - (3) Repairs were performed in an expeditious fashion. Off-shift labor and overtime should be utilized, to the extent practicable, to ensure that such repairs were completed as expeditiously as practicable.
 - (4) All possible steps were taken to minimize emissions during the period of time that repairs were performed.
 - (5) Emissions during the period of time that the repairs were performed will not:
 - (a) Cause and increase in the ground level ambient concentration at or beyond the property line in excess of that allowed by Air Pollution Control Regulation No. 22 and any Calculated Acceptable Ambient Levels; and
 - (b) Cause or contribute to air pollution in violation of any applicable state or national ambient air quality standard.
 - (6) The reasons that it would be impossible or impractical to cease the source operation during said period.
 - (7) The permittee's actions in response to the excess emissions were documented by properly signed, contemporaneous operating logs or other relevant evidence.

This demonstration must be provided to the Office of Air Resources within two working days of the time when the malfunction occurred and contain a

description of the malfunction, any steps taken to minimize emissions and corrective actions taken.

The permittee shall have the burden of proof in seeking to establish that noncompliance was due to unavoidable increases in emissions attributable to the malfunction. [Approval Nos. 1586 & 1587(G)(2)(a-g)]

3. Monitoring Requirements

- a. Ammonia (NH₃)
 - (1) The permittee shall monitor ammonia emissions from C003. Ammonia emissions shall be measured using Conditional Test Method 27 (CTM-027) or another method approved by the USEPA and the Director. Ammonia emissions shall be monitored according to the following schedule:
 - (a) Ammonia emissions shall be measured during the initial performance testing required by Condition I.B.3.d.
 - (b) Thereafter, ammonia emissions shall be measured after 13,000 hours of C003 operation after startup and once every 750 operating hours until the catalyst in C003 is replaced.
 - (c) This testing schedule may be revised by the Office of Air Resources if it determines, based on the ammonia emissions testing for C001, that the above schedule is not sufficient to monitor compliance with Condition I.B.1.f of this permit [Approval Nos. 1586 & 1587(J)(1)(a-c)]
- b. Emission unit G023 shall be equipped with a non-resetable elapsed time meter to indicate, in cumulative hours, the elapsed operating time. [Approval Nos. 1586 & 1587(C)(1)]
- c. Emission unit G023 shall be equipped with a kilowatt hour meter to indicate, in cumulative kilowatt hours, the power generated by the engine generator set. [Approval Nos. 1586 & 1587(C)(2)]
- d. The permittee shall install and operate a thermocouple to measure inlet temperature to C003. [Approval Nos. 1586 & 1587(C)(3)]
- e. The permittee shall install and operate a flowmeter on the urea supply line to monitor overall urea consumption. [Approval Nos. 1586 & 1587(C)(4)]
- f. The permittee shall install and operate a pressure gauge to monitor backpressure at the inlet of C003. [Approval Nos. 1586 & 1587(C)(5)]

g. The permittee shall continuously monitor the inlet temperature to C003. [Approval Nos. 1586 & 1587(F)(8)]

4. Testing Requirements

a. Sulfur Dioxide

Compliance with the sulfur limitations contained in Conditions I.B.1.d.(1) of this permit shall be determined by the procedures referenced in Conditions II.U.2 of this permit.

b. Opacity

Test for determining compliance with the opacity limitations specified in Condition I.B.1.g of this permit shall be performed per 40 CFR 60, Appendix A, Method 9. Additionally, all observers must qualify as per 40 CFR 60, Appendix A, Method 9. [1.3.1, 1.3.2]

- c. Compliance with the emission limitations contained in Conditions I.B.1.(a f) shall be based on one-hour average concentrations. Initial performance testing shall consist of three—one hour test runs at a load typical of representative operation (75 80%) and one-one hour test run at a high load condition (90 100%) and a low load condition (50 60%). Compliance with the emission limitations must be demonstrated for each of the test runs. [Approval Nos. 1586 & 1587(D)(1)]
- d. Within 180 days of completing the installation of C003, initial performance testing shall be conducted on G023. Performance testing shall be conducted for nitrogen oxides, carbon monoxide, particulate matter, ammonia/urea and total nonmethane hydrocarbons.

Thereafter, emission testing shall be conducted annually to determine compliance with the nitrogen oxides emission limitations. Compliance shall be based on one hour average concentrations. Annual emissions testing for nitrogen oxides shall consist of three-one hour test runs at a load typical of representative operation (75 - 80%). Compliance with the emission limitations must be demonstrated for each of the test runs. [Approval Nos. 1586 & 1587 (E)(1), 27.5.5]

e. A stack testing protocol shall be submitted to the Office of Air Resources for review and approval prior to the performance of any stack tests. A copy of the stack testing protocol for the initial performance testing shall be sent to EPA for review and approval. The permittee shall provide the Office of Air Resources at least 60 days prior notice of any performance test. [Approval Nos. 1586 & 1587 (E)(2), 27.5.7(b)]

f. All test procedures used for stack testing shall be approved by the Office of Air Resources prior to the performance of any stack tests. [Approval Nos. 1586 & 1587(E)(3), 27.5.7(c)]

- g. The permittee shall install any and all test ports or platforms necessary to conduct the required stack testing, provide safe access to any platforms and provide the necessary utilities for sampling and testing equipment. [Approval Nos. 1586 & 1587(E)(4), 27.5.7(d)]
- h. All testing shall be conducted under operating conditions deemed acceptable and representative for the purpose of assessing compliance with the applicable emission limitation. [Approval Nos. 1586 & 1587(E)(5), 27.5.7(e)]
- i. A final report of the results of stack testing shall be submitted to the Office of Air Resources no later than 60 days following completion of the testing. [Approval Nos. 1586 & 1587(E)(6), 27.5.7(g)]
- j. All stack testing must be observed by the Office of Air Resources or its authorized representatives to be considered acceptable. [Approval Nos. 1586 & 1587(E)(7), 27.5.7(f)]

5. Recordkeeping Requirements

- a. The permittee shall record in an operating log, on an hourly basis, the inlet temperature to C003 and engine load. The permittee shall keep records of these determinations and provide such records to the Office of Air Resources or its authorized representative and EPA upon request. [Approval Nos. 1586 & 1587(F)(8)]
- b. The permittee shall record on a monthly basis, the pressure drop across C003. The permittee shall keep records of this determination and provide such record to the Office of Air Resources or its authorized representative and EPA upon request. [Approval Nos. 1586 & 1587(F)(9)]
- c. The permittee shall maintain properly signed, contemporaneous operating logs, or other relevant evidence to document actions during startup shutdown periods. [Approval Nos. 1586 & 1587(F)(10)]
- d. The permittee shall, on a monthly basis, no later than 10 days after the first of each month, determine and record the fuel usage for G023 and the urea consumption for the previous month. The permittee shall calculate and record a urea-to-fuel ratio using this data. The permittee shall keep records of these determinations and provide such records to the Office of Air Resources or its authorized representative and EPA upon request. [Approval Nos. 1586 & 1587(F)(5)]

e. The permittee shall, on a monthly basis, no later than 10 days after the first of each month, determine and record the hours of operation for G023 for the previous month. The permittee shall keep records of this determination and provide such records to the Office of Air Resources or its authorized representative and EPA upon request. [Approval Nos. 1586 & 1587(F)(3)]

f. The permittee shall, on a monthly basis, no later than 10 days after the first of each month, determine and record the kilowatt-hours generated for G023 for the previous month. The permittee shall keep records of this determination and provide such records to the Office of Air Resources upon request. [Approval Nos. 1586 & 1587(F)(4)]

6. Reporting Requirements

- a. The permittee shall notify the Office of Air Resources, in writing, of the date of actual start-up of C003, no later than fifteen days after such date. [Approval Nos. 1586 & 1587(F)(7)]
- b. The permittee shall notify the Office of Air Resources of any noncompliance with the terms of Section I.C. of this permit, in writing, within 5 days of the occurrence. [Approval Nos. 1586 & 1587(F)(12)]

7. Other Requirements

- a. To the extent consistent with the requirements of Section I.B. of this permit and applicable federal and state laws, the equipment shall be operated in accordance with the representation of the equipment in the permit application prepared by LFR Levine Fricke dated 16 August 2000. [Approval Nos. 1586 & 1587 (H)(1)]
- b. The emission limitations contained in Conditions I.B.1.(a f) shall not apply during engine startup/shutdown conditions and periods when the engine exhaust temperature is less than 600°F. Engine startup shall be defined as the first five minutes of firing following the initiation of firing. Engine shutdown shall be defined as the cessation of operation for any purpose. [Approval Nos. 1586 & 1587(H)(3)]
- c. At all times, including periods of startup, shutdown and malfunction, the permittee shall, to the extent practicable, maintain and operate the facility in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Office of Air Resources, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures and inspection of the source. [Approval Nos. 1586 & 1587(H)(6)]

C. Requirements for Emissions Unit G024

The following requirements are applicable to:

 Emission unit G024 (Engine No. 24), which is a 2374 HP Caterpillar Internal Combustion Engine – Generator Set, Model No. 3516B, which burns diesel fuel. Emission unit G024 is equipped with air pollution control device C002, which is a Clean Diesel Technology selective catalytic reduction (SCR) system, Model No. ARIS 2000. Urea is injected as the reagent in C002.

1. Emission Limitations

- a. Nitrogen Oxides (as Nitrogen Dioxide (NO₂))
 - (1) The concentration of nitrogen oxides discharged to the atmosphere from G024 shall not exceed 70 ppmv, on a dry basis, corrected to 15% O₂ (1-hour average). [Approval Nos. 1581 & 1674(A)(1)(a)]
 - (2) The emission rate of nitrogen oxides discharged to the atmosphere from G024 shall not exceed 3.37 lbs per hour. [Approval Nos. 1581 & 1674 (A)(1)(b)]
 - (3) Emissions of nitrogen oxides generated from G024 shall be treated by C002 and reduced by 90% before discharge to the atmosphere. [Approval Nos. 1581 & 1674(A)(1)(c)]
- b. Carbon Monoxide (CO)

The emission rate of carbon monoxide from G024 shall not exceed 0.95 gr/bhp-hr or a maximum of 2.94 lbs per hour, whichever is more stringent. [Approval Nos. 1581 & 1674(A)(2)]

c. Total Nonmethane Hydrocarbons (NMHC)

The emission rate of total nonmethane hydrocarbons from G024 shall not exceed 0.4 gr/bhp-hr or a maximum of 1.21 lbs per hour, whichever is more stringent. [Approval Nos. 1581 & 1674(A)(3)]

- d. Sulfur Dioxide (SO₂)
 - (1) All diesel fuel burned in G024 shall contain no more than 0.05 percent sulfur by weight. [Approval Nos. 1581 & 1674 (A)(4)(a), (B)(2)]
 - (2) The emission rate of sulfur dioxide discharged to the atmosphere from G024 shall not exceed 0.83 lbs per hour. [Approval Nos. 1581 & 1674

(A)(4)(b)

e. Particulate Matter (PM)

The emission rate of particulate matter discharged from G024 shall not exceed 0.3 gr/bhp-hr or a maximum of 0.79 lbs per hour, whichever is more stringent. [Approval Nos. 1581 & 1674(A)(5)]

f. Ammonia (NH₃)

- (1) The concentration of ammonia discharged to the atmosphere from G024 shall not exceed 30 ppmv, on a dry basis, corrected to 15 percent O₂ (1-hour average). [Approval Nos. 1581 & 1674(A)(6)(a)]
- (2) The emission rate of ammonia discharged to the atmosphere from G024 shall not exceed 0.64 lbs per hour. [Approval Nos. 1581 & 1674 (A)(6)(b)]
- (3) The ammonia limitations in Conditions I.C.1.f.(1) and I.C.1.f.(2) shall be reviewed by the Office of Air Resources after the first complete catalyst life cycle of C001. The permittee shall submit to the Office of Air Resources a report summarizing ammonia monitoring data for the first complete catalyst life cycle of C001. This report shall be submitted at least 60 days prior to the end of the first complete catalyst life cycle. After completion of this review, the Department may establish a new lower ammonia slip limitation for the facility. Any new ammonia slip limitation shall be based on historical data obtained from this facility and shall provide for operational flexibility and an appropriate margin of compliance. Calculation of any new ammonia slip limitation shall be based on statistical methods, numerical methods or other appropriate analytical methodology that is deemed acceptable by the Department.

Nothing in this Condition shall preclude the Department from establishing a lower ammonia slip limitation if it determines that unreacted ammonia, either alone or in combination with other emissions, may be injurious to human, plant or animal life, cause damage to property or unreasonably interfere with the enjoyment of life and property. [Approval Nos. 1581 & 1674 (A)(6)(c)]

g. Opacity

Visible emissions from G024 shall not exceed 10% opacity except for a period or periods aggregating no more than three minutes in any one hour. This visible emission limitation shall not apply during startup. Engine startup shall be defined as the first five minutes of firing following the initiation of firing. [Approval Nos. 1581 & 1674(B)(1)] Where the presence of uncombined water

is the only reason for failure to meet this requirement, such failure shall not be a violation of this permit. [1.4]

2. **Operating Requirements**

- a. Urea shall be injected into C002 whenever the catalyst bed is at or above 600°F. [Approval Nos. 1581 & 1674(B)(6)]
- b. The SCR system shall be operated at all times that G024 is operating except for: [Approval Nos. 1581 & 1674(B)(5)(a-c)]
 - (1) engine startup; Engine startup shall be defined as the first five minutes of firing following initiation of firing;
 - (2) engine shutdown; Engine shutdown shall be defined as the cessation of operation for any purpose; and
 - (3) periods of low loads where the engine exhaust temperature is less than 600°F. At all times, the permittee shall operate its facility so as to minimize the period of time that engine exhaust temperature is less than 600°F so as to maximize the use of C002
- c. C002 shall be operated and maintained according to its design specifications and in a manner consistent with good air pollution control practices for minimizing emissions. [16.1]
- d. Malfunction means a sudden and unavoidable breakdown of process or control equipment. In the case of a malfunction of C002, all reasonable measures shall be taken to assure resumption of the designed control efficiency as soon as possible. In the event that the malfunction of C002 is expected or may reasonably be expected to continue for longer than 24 hours and if the permittee wishes to operate G024 at any time beyond that period, the Director shall be petitioned for a variance under Section 23-23-15 of the General Laws of Rhode Island, as amended. Such petition shall include, but is not limited to, the following: [Approval Nos. 1581 & 1674 (G)(1)(a-e), 16.2]
 - (1) Identification of the specific air pollution control system (i.e. C002) and source on which it is installed (i.e. G024);
 - (2) The expected period of time that the air pollution control system will be malfunctioning or out of service;
 - (3) The nature and quantity of air contaminants likely to be emitted during said period;

- (4) Measures that will be taken to minimize the length of said period;
- (5) The reasons that it would be impossible or impractical to cease the source operation during said period.
- f. The permittee may seek to establish that a malfunction of any air pollution control system that would result in noncompliance with any of the terms of this permit or any other applicable air pollution control rules and regulations was due to unavoidable increases in emissions attributable to the malfunction. To do so, the permittee must demonstrate to the Office of Air Resources that:
 - (1) The malfunction was not attributable to improperly designed equipment, lack of preventative maintenance, careless or improper operation or operator error;
 - (2) The malfunction is not part of a recurring pattern indicative of inadequate design, operation or maintenance;
 - (3) Repairs were performed in an expeditious fashion. Off-shift labor and overtime should be utilized, to the extent practicable, to ensure that such repairs were completed as expeditiously as practicable.
 - (4) All possible steps were taken to minimize emissions during the period of time that repairs were performed.
 - (5) Emissions during the period of time that the repairs were performed will not:
 - (a) Cause and increase in the ground level ambient concentration at or beyond the property line in excess of that allowed by Air Pollution Control Regulation No. 22 and any Calculated Acceptable Ambient Levels; and
 - (b) Cause or contribute to air pollution in violation of any applicable state or national ambient air quality standard.
 - (6) The reasons that it would be impossible or impractical to cease the source operation during said period.
 - (7) The permittee's actions in response to the excess emissions were documented by properly signed, contemporaneous operating logs or other relevant evidence.

This demonstration must be provided to the Office of Air Resources within two working days of the time when the malfunction occurred and contain a description of the malfunction, any steps taken to minimize emissions and

corrective actions taken.

The permittee shall have the burden of proof in seeking to establish that noncompliance was due to unavoidable increases in emissions attributable to the malfunction. [Approval Nos. 1581 & 1674(G)(2)(a-g)]

3. Monitoring Requirements

- a. Ammonia (NH₃)
 - (1) The permittee shall monitor ammonia emissions from C002. Ammonia emissions shall be measured using Conditional Test Method 27 (CTM-027) or another method approved by the USEPA and the Director. Ammonia emissions shall be monitored according to the following schedule:
 - (a) Ammonia emissions shall be measured during the initial performance testing required by Condition I.C.3.d.
 - (b) Thereafter, ammonia emissions shall be measured after 13,000 hours of C002 operation after startup and once every 750 operating hours until the catalyst in C002 is replaced.
 - (c) This testing schedule may be revised by the Office of Air Resources if it determines, based on the ammonia emissions testing for C001, that the above schedule is not sufficient to monitor compliance with Condition I.C.1.f of this permit [Approval Nos. 1581 & 1674(J)(1)(a-c)]
- b. Emission unit G024 shall be equipped with a non-resetable elapsed time meter to indicate, in cumulative hours, the elapsed operating time. [Approval Nos. 1581 & 1674(C)(1)]
- c. Emission unit G024 shall be equipped with a kilowatt hour meter to indicate, in cumulative kilowatt hours, the power generated by the engine generator set. [Approval Nos. 1581 & 1674(C)(2)]
- d. The permittee shall install and operate a thermocouple to measure inlet temperature to C002. [Approval Nos. 1581 & 1674(C)(3)]
- e. The permittee shall install and operate a flowmeter on the urea supply line to monitor overall urea consumption. [Approval Nos. 1581 & 1674(C)(4)]
- f. The permittee shall install and operate a pressure gauge to monitor backpressure at the inlet of C002. [Approval Nos. 1581 & 1674(C)(5)]

g. The permittee shall continuously monitor the inlet temperature to C002. [Approval Nos. 1581 & 1674(F)(8)]

4. Testing Requirements

a. Sulfur Dioxide

Compliance with the sulfur limitations contained in Conditions I.C.1.d.(1) of this permit shall be determined by the procedures referenced in Conditions II.U.2 of this permit.

b. Opacity

Test for determining compliance with the opacity limitations specified in Condition I.C.1.g of this permit shall be performed per 40 CFR 60, Appendix A, Method 9. Additionally, all observers must qualify as per 40 CFR 60, Appendix A, Method 9. [1.3.1, 1.3.2]

- c. Compliance with the emission limitations contained in Conditions I.C.1.(a f) shall be based on one-hour average concentrations. Initial performance testing shall consist of three–one hour test runs at a load typical of representative operation (75 80%) and one-one hour test run at a high load condition (90 100%) and a low load condition (50 60%). Compliance with the emission limitations must be demonstrated for each of the test runs. [Approval Nos. 1581 & 1674(D)(1)]
- d. Within 180 days of completing the installation of G024, initial performance testing shall be conducted on G024. Performance testing shall be conducted for nitrogen oxides, carbon monoxide, particulate matter, ammonia and total nonmethane hydrocarbons.

Thereafter, emission testing shall be conducted annually to determine compliance with the nitrogen oxides emission limitations. Compliance shall be based on one hour average concentrations. Annual emissions testing for nitrogen oxides shall consist of three-one hour test runs at a load typical of representative operation (75 - 80%). Compliance with the emission limitations must be demonstrated for each of the test runs. [Approval Nos. 1581 & 1674 (E)(1), 27.5.5]

e. A stack testing protocol shall be submitted to the Office of Air Resources for review and approval prior to the performance of any stack tests. A copy of the stack testing protocol for the initial performance testing shall be sent to EPA for review and approval. The permittee shall provide the Office of Air Resources at least 60 days prior notice of any performance test. [Approval Nos. 1581 & 1674 (E)(2), 27.5.7(b)]

f. All test procedures used for stack testing shall be approved by the Office of Air Resources prior to the performance of any stack tests. [Approval Nos. 1581 & 1674(E)(3), 27.5.7(c)]

- g. The permittee shall install any and all test ports or platforms necessary to conduct the required stack testing, provide safe access to any platforms and provide the necessary utilities for sampling and testing equipment. [Approval Nos. 1581 & 1674(E)(4), 27.5.7(d)]
- h. All testing shall be conducted under operating conditions deemed acceptable and representative for the purpose of assessing compliance with the applicable emission limitation. [Approval Nos. 1581 & 1674(E)(5), 27.5.7(e)]
- i. A final report of the results of stack testing shall be submitted to the Office of Air Resources no later than 60 days following completion of the testing. [Approval Nos. 1581 & 1674(E)(6), 27.5.7(g)]
- j. All stack testing must be observed by the Office of Air Resources or its authorized representatives to be considered acceptable. [Approval Nos. 1581 & 1674(E)(7), 27.5.7(f)]

5. Recordkeeping Requirements

- a. The permittee shall record in an operating log, on an hourly basis, the inlet temperature to C002 and engine load. The permittee shall keep records of these determinations and provide such records to the Office of Air Resources or its authorized representative and EPA upon request. [Approval Nos. 1581 & 1674(F)(8)]
- b. The permittee shall record on a monthly basis, the pressure drop across C002. The permittee shall keep records of this determination and provide such record to the Office of Air Resources or its authorized representative and EPA upon request. [Approval Nos. 1581 & 1674(F)(9)]
- c. The permittee shall maintain properly signed, contemporaneous operating logs, or other relevant evidence to document actions during startup shutdown periods. [Approval Nos. 1581 & 1674(F)(10)]
- d. The permittee shall, on a monthly basis, no later than 10 days after the first of each month, determine and record the fuel usage for G024 and the urea consumption for the previous month. The permittee shall calculate and record a urea-to-fuel ratio using this data. The permittee shall keep records of these determinations and provide such records to the Office of Air Resources or its authorized representative and EPA upon request. [Approval Nos. 1581 & 1674(F)(5)]

e. The permittee shall, on a monthly basis, no later than 10 days after the first of each month, determine and record the hours of operation for G024 for the previous month. The permittee shall keep records of this determination and provide such records to the Office of Air Resources or its authorized representative and EPA upon request. [Approval Nos. 1581 & 1674(F)(3)]

f. The permittee shall, on a monthly basis, no later than 10 days after the first of each month, determine and record the kilowatt-hours generated for G024 for the previous month. The permittee shall keep records of this determination and provide such records to the Office of Air Resources upon request. [Approval Nos. 1581 & 1674(F)(4)]

6. Reporting Requirements

- a. The permittee shall notify the Office of Air Resources, in writing, of the date of actual start-up of G024, no later than fifteen days after such date. [Approval Nos. 1581 & 1674(F)(7)]
- b. The permittee shall notify the Office of Air Resources of any noncompliance with the terms of Section I.C. of this permit, in writing, within 5 days of the occurrence. [Approval Nos. 1581 & 1674(F)(12)]

7. Other Requirements

- a. To the extent consistent with the requirements of Section I.C. of this permit and applicable federal and state laws, the equipment shall be operated in accordance with the representation of the equipment in the permit application prepared by LFR Levine Fricke dated 29 August 2001. [Approval Nos. 1581 & 1674 (H)(1)]
- b. The emission limitations contained in Conditions I.C.1.(a f) shall not apply during engine startup/shutdown conditions and periods when the engine exhaust temperature is less than 600°F. Engine startup shall be defined as the first five minutes of firing following the initiation of firing. Engine shutdown shall be defined as the cessation of operation for any purpose. [Approval Nos. 1581 & 1674(H)(3)]
- c. At all times, including periods of startup, shutdown and malfunction, the permittee shall, to the extent practicable, maintain and operate the facility in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Office of Air Resources, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures and inspection of the source. [Approval Nos. 1581 & 1674(H)(6)]

D. Requirements for Emissions Units G011 and G019

The following requirements are applicable to:

• Emission unit G011 (Engine No. 11), which is a 2000 HP Fairbanks Morse Internal Combustion Engine, Model No. 38D8 1/8, which burns diesel fuel. G011 is an emergency/standby unit.

• Emission unit G019 (Engine No. 19), which is a 1615 HP Caterpillar Internal Combustion Engine – Generator Set, Model No. 1615, which burns diesel fuel.

1. Emission Limitations

a. Sulfur Dioxide

All diesel fuel burned in G011 and G019 shall contain no more than 0.05 percent sulfur by weight. [Approval Nos. 1581 & 1674(B)(2), Approval Nos. 1492 & 1547(B)(2), Approval Nos. 1586 & 1587(B)(2)]

b. Opacity

Visible emissions from G011 or G019 shall not exceed 10% opacity except for a period or periods aggregating no more than three minutes in any one hour. This visible emission limitation shall not apply during startup. Engine startup shall be defined as the first ten minutes of firing following the initiation of firing. [Approval 1409 & 1581(B)(1), Approval Nos. 1492 & 1547(B)(1), Approval Nos. 1586 & 1587(B)(2)] Where the presence of uncombined water is the only reason for failure to meet this requirement, such failure shall not be a violation of this permit. [1.4]

2. Operating Requirements

- a. G011 and G019 shall be used to provide electrical power under the following circumstances:
 - (1) One of the principal power generating units (G024, G022 or G023) is pulled off-line for maintenance or repairs, or;
 - (2) During periods when the power demand cannot be met by G024, G022 and G023 combined. [27.1.8, Consent Decree (United States v. Block Island Power Co., Section II.9), Approval No. 1409(B)(3)]
- b. G011 and G019 shall be operated less than 500 hours each, during any consecutive twelve (12) month period. If the hours of operation for either G011 or G019 exceed 500 hours in any 12-month period, that unit shall immediately

be in compliance with RACT as specified in APC Regulation No. 27. [27.2.3, Consent Decree (United States v. Block Island Power Co., Section II.9)]

3. Monitoring Requirements

- a. Emission units G011 and G019 shall be equipped with a non-resetable elapsed time meter to indicate, in cumulative hours, the elapsed operating time. [Approval 1409 & 1581(C)(1) Approval Nos. 1492 & 1547(C)(1), Approval Nos. 1586 & 1587(C)(1), 27.6.10(b)]
- b. Emission units G011 and G019 shall be equipped with a kilowatt hour meter to indicate, in cumulative kilowatt hours, the power generated by each engine generator set. [Approval Nos. 1581 & 1674(C)(2), Approval Nos. 1492 & 1547(C)(2), Approval Nos. 1586 & 1587(C)(2)]

4. Testing Requirements

a. Sulfur Dioxide

Compliance with the sulfur limitations contained in Conditions I.D.1.a of this permit shall be determined by the procedures referenced in Conditions II.U.2 of this permit

b. Opacity

Tests for determining compliance with the opacity limitations specified in Condition I.D.1.b of this permit shall be performed per 40 CFR 60, Appendix A, Method 9. Additionally, all observers must qualify as per 40 CFR 60, Appendix A, Method 9. [1.3.1, 1.3.2]

5. Recordkeeping Requirements

- a. The permittee shall, on a monthly basis, no later than 10 days after the first of each month, determine and record the hours of operation for G011 and G019 for the previous month. The permittee shall keep records of this determination and provide such records to the Office of Air Resources or its authorized representative and EPA upon request. [Approval Nos. 1581 & 1674(F)(3), Approval Nos. 1492 & 1547(F)(3), Approval Nos. 1586 & 1587(F)(3)]
- b. The permittee shall, on a monthly basis, no later than 10 days after the first of each month, determine and record the kilowatt-hours generated for G011 and G019 for the previous month. The permittee shall keep records of this determination and provide such records to the Office of Air Resources upon request. [Approval Nos. 1581 & 1674(F)(4), Approval Nos. 1492 & 1547(F)(4), Approval Nos. 1586 & 1587(F)(4)]

c. The permittee shall maintain records to certify that the ignition timing of G011 and G019 has been inspected and adjusted at least once every three (3) years. [27.6.10(e)]

6. Reporting Requirements

a. The permittee shall notify the Office of Air Resources, in writing, whenever the hours of operation in any twelve (12) month period exceeds 500 hours for G011 or G019. [27.6.10(d)]

E. Requirements for Emissions Units T006, T007, T008, T009 and T010

The following requirements are applicable to:

• Emission units T006, T007, T008, T009 and T010, each of which is a 20,000 gallon Diesel Oil Storage Tank. T006, T007, T008, T009 and T010 are each equipped with a Horizontal Roof.

1. Reporting Requirements

- a. The permittee of T006, T007, T008, T009 and T010 shall keep readily accessible records showing the dimension of T006, T007, T008, T009 and T010 and an analysis showing the capacity of T006, T007, T008 T009 and T010. [40 CFR 60.116b(b)]
- b. The record required by Condition I.E.1.a of this Section shall be kept for the life of the source. [40 CFR 60.116b(a)]

F. Facility Requirements

1. Emission Limitation

a. Nitrogen Oxides

The quantity of nitrogen oxides emitted from the entire facility shall not exceed 70,000 lbs in any consecutive 12-month period. [Approval Nos. 1492 & 1547(B)(3), Approval Nos. 1586 & 1587(B)(3) and Approval Nos. 1581 & 1674(B)(3)]

2. Operating Requirements

a. G024, G022 or G023 shall be operated at all times, except for engine malfunctions/repairs. [Approval Nos. 1492 & 1547(B)(4), Approval Nos. 1586 & 1587(B)(4) and Approval Nos. 1581 & 1674(B)(4)]

3. Compliance Determinations

a. Compliance with the limitation for nitrogen oxides emissions contained in Condition I.F.1.a shall be determined by using the procedures in Attachment A and the following emission factors:

(1) G024: 0.00144 lbs of NO_x emitted per horsepower-

hour.

(2) G022: 0.0016 lbs of NO_x emitted per horsepower-hour.

(3) G023: 0.00144 lbs of NO_x emitted per horsepower-hour

(4) G019 and G011: AP-42 emission factors for NO_x from diesel

engines

The compliance determination shall include periods of low loads where the engine exhaust temperature is less than 600°F and the SCR system is not used. Emission factors during these periods shall be 0.0144 lbs/hp-hr for G024 and G023 and 0.016 lbs/hp-hr for G022. [Approval Nos. 1586 & 1587(D)(2)(a-c), Approval Nos. 1581 & 1674(D)(2)(a-c)]

4. Recordkeeping Requirements

a. The permittee shall, on a monthly basis, no later than 10 days after the first of each month, determine the nitrogen oxides emissions for the entire facility for the previous 12 months. The permittee shall keep records of this determination and provide such records to the Office of Air Resources or its authorized representative and EPA upon request. [Approval Nos. 1581 & 1674(F)(1), Approval Nos. 1492 & 1547(F)(1), Approval Nos. 1586 & 1587(F)(1)]

5. Reporting Requirements

a. The permittee shall notify the Office of Air Resources in writing within 15 days, whenever the quantity of nitrogen oxides emitted from the Block Island facility exceeds 70,000 lbs in any consecutive 12-month period. [Approval Nos. 1581 & 1674(F)(2), Approval No. 1586 & 1587(F)(2)]

SECTION II. GENERAL CONDITIONS

A. Annual Emissions Fee Payment

The permittee shall pay an annual emissions fee as established in Air Pollution Control Regulation No. 28 "Operating Permit Fees". [29.6.8(d)]

B. Permit Renewal and Expiration

This permit is issued for a fixed term of 5 years. The permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least 12 months prior to the date of permit expiration. Upon receipt of a complete and timely application for renewal, this source may continue to operate subject to final action by the Office of Air Resources on the renewal application. This protection shall cease to apply if, subsequent to a completeness determination, the applicant fails to submit by the deadline specified in writing by the Office of Air Resources any additional information identified as being needed to process the application. The application for renewal shall include the current permit number, description of permit revisions and off-permit changes that occurred during the permit term, and any applicable requirements that were promulgated and not incorporated into the permit during the permit term. [29.6.8(a),29.4.2(c), 29.4.6]

C. Transfer of Ownership or Operation

This permit is nontransferable by the permittee. Future owners and operators must obtain a new operating permit from the Office of Air Resources. A change in ownership or operational control of this source is treated as an administrative permit amendment if no other change in this permit is necessary and provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to the Office of Air Resources. [29.10.1(a)(4)]

D. **Property Rights**

This permit does not convey any property rights of any sort, or any exclusive privilege. [29.6.8(c)(4)]

E. Submissions

1. Reports, test data, monitoring data, notifications, and requests for renewal shall be submitted to:

RIDEM - Office Air Resources Compliance Assurance Section 235 Promenade St. Room 230 Providence, RI 02908

2. Any records, compliance certifications and monitoring data required by the provisions of this permit to be submitted to USEPA shall be sent to:

USEPA Region I Office of Environmental Stewardship Director, Air Compliance Program Attn: Air Compliance Clerk One Congress St. Suite 1100 (SEA) Boston, MA 02114 - 2023

3. Any document submitted shall be certified as being true, accurate, and complete by a responsible official. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete. [29.6.8(e)]

F. <u>Inspection and Entry</u>

- 1. Employees of the Office of Air Resources and its authorized representatives shall be allowed to enter this facility at all reasonable times for the purpose of:
 - a. having access to and copying at reasonable times any records that must be kept under the conditions of this permit;
 - b. inspecting at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
 - c. sampling or monitoring, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or other applicable requirements.[RIGL 23-23-5(7), 29.6.8(f)(1-4), [Approval Nos. 1581 & 1674(H)(2), Approval Nos. 1586 & 1587(H)(2) and Approval Nos. 1492 & 1547(H)(2)]

Nothing in this condition shall limit the ability of EPA to inspect or enter the premises of the permittee under Section 114 or other provisions of the Clean Air Act.

G. Compliance

1. The permittee must comply with all conditions of this permit. Any noncompliance with a federally enforceable permit condition constitutes a violation of the Clean Air Act and is grounds for enforcement action, for permit termination, revocation and reissuance or modification, or for denial of a permit renewal application. Any noncompliance with a permit condition designated as state only enforceable constitutes a violation of state rules only and is grounds for enforcement action, for permit termination, revocation and reissuance or modification, or for denial of a permit renewal application. [29.6.8(c)(1)]

- 2. For each unit at the facility for which an applicable requirement becomes effective during the permit term, the permittee shall meet such requirements on a timely basis unless a more detailed schedule is expressly required by the applicable requirement. [29.6.5(a)]
- 3. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [29.6.8(c)(2)]

H. Excess Emissions Due to an Emergency

As the term is used in this condition an "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of this source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes this source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error. [Approval Nos. 1581 & 1674(I), Approval Nos. 1492 & 1547(I), Approval Nos. 1586 & 1587(I), 29.6.11(b)]

Technology-based emission limits are those established on the basis of emission reductions achievable with various control measures or process changes (e.g., a new source performance standard) rather than those established to attain a health based air quality standard. The permittee may seek to establish that noncompliance with a technology-based emission limitation under this permit was due to an emergency. To do so, the permittee shall demonstrate the affirmative defense of emergency through properly signed, contemporaneous operating logs, or other relevant evidence that: [29.6.11(a) & 29.6.11(c)]

- 1. an emergency occurred and that the permittee can identify the cause(s) of the emergency; [Approval Nos. 1581 & 1674(I)(1), Approval Nos. 1492 & 1547(I)(1), Approval Nos. 1586 & 1587(I)(1), 29.6.11(c)(1)]
- 2. the permitted facility was at the time being properly operated; [Approval Nos. 1581 & 1674(I)(2), Approval Nos. 1492 & 1547(I)(2), Approval Nos. 1586 & 1587(I)(2)

29.6.11(c)(2)]

during the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards, or other requirements in this permit; and [Approval Nos. 1581 & 1674(I)(3), Approval Nos. 1492 & 1547(I)(3), Approval Nos. 1586 & 1587(I)(3), 29.6.11(c)(3)]

4. the permittee submitted notice of the emergency to the Office of Air Resources within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. This notice fulfills the requirements of Condition II.AA.3 of this permit. [Approval Nos. 1581 & 1674(I)(4), Approval Nos. 1492 & 1547(I)(4), Approval Nos. 1586 & 1587(I)(4) 29.6.11(c)(4)]

The permittee shall have the burden of proof in seeking to establish the occurrence of an emergency. [29.6.11(d), Approval Nos. 1581 & 1674(I), Approval Nos. 1492 & 1547(I), Approval Nos. 1586 & 1587(I)]

I. <u>Duty to Provide Information</u>

The permittee shall furnish to the Office of Air Resources, within a reasonable time, any information that the Office of Air Resources may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Office of Air Resources copies of records that the permittee is required to keep by this permit, or for information claimed to be confidential, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality. [29.6.8(c)(5)]

J. Duty to Supplement

The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the Office of Air Resources. The permittee shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete renewal application was submitted but prior to release of a draft permit. [29.5.4]

K. Reopening for Cause

The Office of Air Resources will reopen and revise this permit as necessary to remedy deficiencies in the following circumstances:

1. Additional requirements under the Clean Air Act become applicable to a major source 3 or more years prior to the expiration date of this permit. Such a reopening

shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the expiration date of this permit, unless this permit or any of its terms and conditions has been extended. [29.6.13(a)]

- 2. The Office of Air Resources or the Administrator determines that this permit contains a material mistake or inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit. [Approval Nos. 1581 & 1674(H)(4)(a-b), Approval Nos. 1586 & 1587(H)(4)(a-b), 29.6.13(c)]
- 3. The Office of Air Resources or the Administrator determines that the permit must be revised or revoked to assure compliance with the applicable requirements. [29.6.13(d)]

Reopenings shall not be initiated before a notice of intent to reopen is provided to the permittee by the Office of Air Resources at least 30 days in advance of the date that this permit is to be reopened, except that the Office of Air Resources may provide a shorter time period (but not less than 5 days) in the case of an emergency. [29.9.5(b)]

Proceedings to reopen and issue this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable. [29.9.5(a), Approval Nos. 1581 & 1674(H)(5), Approval Nos. 1492 & 1547(H)(5), Approval Nos. 1586 & 1587(H)(5)]

All permit conditions remain in effect until such time as the Office of Air Resources takes final action. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [§70.6(a)(6)(iii)]

L. Severability Clause

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby. [29.6.8(b)]

M. Off-Permit Changes

- 1. The permittee is allowed to make certain changes that are not addressed or prohibited by this permit without a permit revision, provided that the following conditions are met: [29.11.2(a)]
 - a. Each such change shall not violate any term or condition of this permit. [29.11.2(b)]

- b. Each change shall comply with all applicable requirements. [29.11.2(b)]
- c. Changes under this provision may not include changes or activities subject to any requirement under Title IV or modifications under any provision of Title I of the Clean Air Act. [29.11.2(a)]
- d. Before the permit change is made, the permittee must provide contemporaneous written notice to the Office of Air Resources and the USEPA Region I, except for changes that qualify as insignificant activities in Appendix A of APC Regulation No. 29. This notice shall describe each change, including the date, and change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change. [29.11.2(c)]
- e. The permit shield does not apply to changes made under this provision. [29.11.2(d)]
- f. The permittee shall keep a record describing changes made at the stationary source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes, including any other data necessary to show compliance with applicable ambient air quality standards. The record shall reside at the permittee's facility. [29.11.2(e)]
- 2. Changes made pursuant to this provision shall not be exempt from the requirement to obtain a minor source permit pursuant to the requirements of Air Pollution Control Regulation No. 9, if applicable. [29.11.2(a)]
- 3. Changes made pursuant to this provision shall be incorporated into this permit at the time of renewal. [29.11.2(f)]

N. Section 502(b)(10) Changes

- 1. The permittee is allowed to make changes within this permitted facility that contravene the specific terms of this permit without applying for a permit revision, provided the changes do not exceed the emissions allowable under this permit, whether expressed therein as a rate of emissions or in terms of total emissions and are not Title I modifications. This class of changes does <u>not</u> include:
 - a. changes that would violate applicable requirements; or
 - b. changes to federally enforceable permit terms or conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance

certification requirements. [29.11.1(a), 29.1.36]

2. The permittee shall provide written notice to the Office of Air Resources and the USEPA Region I any change made under this provision. The notice must be received by the Office of Air Resources no later than fourteen (14) days in advance of the proposed changes. The notice shall include information describing the nature of the change, the effect of the change on the emission of any air contaminant, the scheduled completion date of the planned change and identify any permit terms or conditions that are no longer applicable as a result of the change. The permittee shall attach each notice to its copy of this permit. [29.11.1(a)(1), 29.11.1(a)(2), Approval Nos. 1581 & 1674(F)(11), Approval Nos. 1492 & 1547(F)(11), Approval Nos. 1586 & 1587(F)(11]

- 3. The permittee shall be allowed to make such change proposed in its notice the day following the last day of the advance notice described in paragraph 2 if the Office of Air Resources has not responded nor objected to the proposed change on or before that day. [29.11.1(b)]
- 4. Any permit shield provided in this permit does not apply to changes made under this provision. If subsequent changes cause the permittee's operations and emissions to revert to those anticipated in this permit, the permittee resumes compliance with the terms and conditions of the permit, and has provided the Office of Air Resources and EPA with a minimum of fourteen (14) days advance notice of such changes in accordance with the provisions of paragraph 2, the permit shield shall be reinstated in accordance with terms and conditions stated in this permit. [29.11.1(c)]
- 5. Changes made pursuant to this provision shall be incorporated into the operating permit at the time of renewal. [29.11.1(d)]

O. Emissions Trading

No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit. [29.6.6(a)]

P. Emission of Air Contaminants Detrimental to Person or Property

The permittee shall not emit any air contaminant which either alone or in connection with other emissions, by reason of their concentration or duration, may be injurious to human, plant or animal life, or cause damage to property or which unreasonably interferes with the enjoyment of life or property. [7.1]

Q. Odors

1. The permittee shall not emit or cause to be emitted into the atmosphere any air contaminant or combination of air contaminants which creates an objectionable odor beyond the property line of this facility. [17.1]

2. A staff member of the Office of Air Resources shall determine by personal observation if an odor is objectionable, taking into account its nature, concentration, location, duration and source. [17.2]

R. <u>Visible Emissions</u>

- 1. Except as may be specified in other provisions of this permit, the permittee shall not emit into the atmosphere, from any emission unit, any air contaminant, for a period or periods aggregating more than three minutes in any one hour, which is greater than or equal to 20 percent opacity. [1.2] Where the presence of uncombined water is the only reason for failure to meet this requirement, such failure shall not be a violation of this permit. [1.4]
- 2. Tests for determining compliance with the opacity limitations specified in this permit shall be performed per 40 CFR 60, Appendix A, Method 9. Additionally, all observers must qualify as per 40 CFR 60, Appendix A, Method 9. [1.3.1, 1.3.2]

S. Open Fires

It shall be unlawful for the permittee to burn any material in an open fire, except as provided in APC Regulation No. 4, Section 4.3. [4.2]

T. Construction Permits

It shall be unlawful for the permittee to construct, install, modify or cause the construction, installation or modification of any stationary source subject to the provisions of APC Regulation No. 9 without obtaining either a minor source permit or a major source permit from the Director. [9.2.1]

U. Sulfur in Fuel

- 1. Except as may be specified in other provisions of this permit, unless the Director declares in writing after a hearing that a shortage of low sulfur fuel exists, the permittee shall not use or store fuel oil with a sulfur content greater than 1.0%, except for use with motor vehicles. [8.2, 8.3.6]
- 2. Compliance with the sulfur in fuel limitations contained in this section shall be determined by the procedures listed below or by another method deemed equivalent by the Director and USEPA: [29.6.3(a)]
 - a. For the initial shipment of fuel oil from a supplier, the permittee shall obtain a certification from the fuel supplier, which contains:

- (1) For distillate fuel oil:
 - (a) the name of the supplier
 - (b) The sulfur content of the fuel from which the shipment came or the shipment itself;
 - (c) The location of the fuel when the sample was drawn for analysis to determine the sulfur content of the fuel, specifically including whether the fuel was sampled as delivered to Block Island Company or whether the sample was drawn from fuel in storage at the fuel supplier's facility or another location;
 - (d) The method used to determine the sulfur content of the fuel. [Approval Nos. 1581 & 1674(D)(3)(a-d), Approval Nos. 1492 & 1547(D)(3)(a-d), Approval Nos. 1586 & 1587(D)(3)(a-d)]
- b. For subsequent shipments of fuel oil from a supplier, the permittee shall obtain a bill of lading from the fuel supplier, which contains:
 - (1) For distillate fuel oil:
 - (a) The name of the fuel supplier,
 - (b) A statement that the sulfur content of the fuel shipment itself or the fuel from which the shipment came does not exceed 0.05 percent sulfur by weight or meets the requirements for diesel fuel quality in 40 CFR 80.29(a). [Approval Nos. 1581 & 1674(D)(3)(a-d), Approval Nos. 1492 & 1547(D)(3)(a-d), Approval Nos. 1586 & 1587(D)(3)(a-d)]
- c. As an alternative to fuel oil certification, the permittee may elect to sample the fuel oil prior to combustion. Sampling and analysis shall be conducted after each new shipment of fuel oil is received. Samples shall be collected from the fuel tank immediately after the fuel tank is filled and before any fuel oil is combusted. [8.4.1(b), 27.6.6, Approval Nos. 1581 & 1674(D)(4), Approval Nos. 1492 & 1547(D)(4), Approval Nos. 1586 & 1587(D)(4)]
- d. All fuel oil must be sampled and analyzed according to ASTM methods that have the prior approval of or are required by the Office. [8.4.1(b), 27.6.6]
- e. Copies of the fuel oil analysis sheets shall be maintained at the facility and be made accessible for review by the Office or designated personnel of the

Office and EPA. These records shall include a certified statement, signed by a responsible official, that the records represent all of the fuel combusted during each quarter. [27.6.7, [Approval Nos. 1581 & 1674(F)(6), Approval Nos. 1492 & 1547(F)(6), Approval Nos. 1586 & 1587(F)(6)]

f. The Director may require, under his supervision, the collection of fossil fuel samples for the purpose of determining compliance with the sulfur limitations in this permit. Sampling and analysis of fossil fuels under Condition II.U.2 of this permit shall not limit the collection of samples under this condition. [8.4.3]

V. Air Pollution Episodes

Conditions justifying the proclamation of an air pollution alert, air pollution warning or air pollution emergency shall be deemed to exist whenever the Director determines that the accumulation of air pollutants in any place is attaining or has attained levels which could, if such levels are sustained or exceeded, lead to a substantial threat to the health of persons. If the governor declares an air pollution alert, air pollution warning or air pollution

emergency, the permittee shall comply with the applicable requirements contained in APC Regulation No. 10. [10.1]

W. Fugitive Dust

The permittee shall not cause or permit any materials, including but not limited to sand, gravel, soil, aggregate and any other organic or inorganic solid matter capable of releasing dust, to be handled, transported, mined, quarried, stored or otherwise utilized in any way so as to cause airborne particulate matter to travel beyond the property line of the facility without taking adequate precautions to prevent particulate matter from becoming airborne. Such precaution shall be in accordance with good industrial practice as determined by the Director and/or shall be other reasonable fugitive dust prevention measures as determined by the director. [5.2]

X. <u>Compliance Certifications</u>

- 1. The permittee shall submit a certification of compliance with permit terms and conditions annually. [29.6.5(c)(1)]
- 2. The certification shall describe the following:
 - a. the permit term or condition that is the basis of the certification; [29.6.5(c)(3)a]
 - b. the current compliance status; [29.6.5(c)(3)b]
 - c. whether compliance was continuous or intermittent; [29.6.5(c)(3)c]

- d. the methods used for determining compliance, currently and over the reporting period; and [29.6.5(c)(3)d]
- 3. All compliance certifications shall be submitted to the Office of Air Resources and to the USEPA Region I. [29.6.5(c)(4)]
- 4. All compliance certifications shall be certified as being true, accurate, and complete by a responsible corporate official. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete. [29.6.8(e)]

Y. Permit Shield

- 1. Compliance with the terms and conditions of this permit shall be deemed compliance with all requirements applicable to the source in: Approval Nos. 1492, 1547, 1581 and 1674, 40 CFR 68, 40 CFR 82 and RI APC Regulations Nos. 1, 4, 5, 7, 8, 9, 14, 16, 17, 27, 28 and 29. [29.6.12(a)(1)]
- 2. The Office of Air Resources has determined that units G011 G019, G022, G023 G024, T006, T007, T008, T009 and T010 are not subject to the following regulations; RI APC Control Regulations 2, 3, 6, 10, 11, 12, 13, 15, 18, 19, 20, 21, 22, 23, 24, 25, 26, 30, 31, 32, 33, 34, 35, 36, 37, and 38. [29.6.12(a)(2)]
- 3. Nothing in this permit shall alter or affect the following:
 - a. the provisions of Section 303 of the Clean Air Act, including the authority of EPA under that Section. [29.6.12(c)(1)]
 - b. the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance. [29.6.12(c)(2)]
 - c. the applicable requirements of the acid rain program consistent with Section 408 of the Clean Air Act. [29.6.12(c)(3)]
 - d. the ability of the EPA to obtain information under Section 114. [29.6.12(c)(4)]
- 4. If it is determined that this operating permit was issued based on inaccurate or incomplete information provided by the permittee, this permit shield shall be void as to the portions of this permit which are affected, directly or indirectly, by the inaccurate or incomplete information. [29.6.12(d)]

Z. Recordkeeping

- 1. The permittee shall, at the request of the Director, maintain a record of and provide data on operational processes, fuel usage, raw materials, stack dimensions, exhaust gas flow rates and temperatures, emissions of air contaminants, steam or hot water generator capacities, types of equipment producing air contaminants and air pollution control systems or other data that may be necessary to determine if the facility is in compliance with air pollution control regulations. [14.2.1]
- 2. All records and supporting information required by this permit shall be maintained at the permittee's 100 Ocean Ave facility for a period of at least 5 years from the date of sample monitoring, measurement, report or application, and shall be made available to representatives of the Office of Air Resources and EPA upon request. Supporting information includes all calibration and maintenance records and all original stripchart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. [14.2.1, 29.6.4(a)(2), Approval Nos. 1581 & 1674(F)(13), Approval Nos. 1492 & 1547(F)(13), Approval Nos. 1586 & 1587(F)(13)]
- 3. The permittee shall keep records of required monitoring information that include the following:
 - a. The date, place and time of sampling or measurements; [29.6.4(a)(1)a]
 - b. The date(s) analyses were performed; [29.6.4(a)(1)b]
 - c. The company or entity that performed the analyses; [29.6.4(a)(1)c]
 - d. The analytical techniques or methods used; [29.6.4(a)(1)d]
 - e. The results of such analyses; and [29.6.4(a)(1)e]
 - f. The operating conditions as existing at the time of sampling or measurement. [29.6.4(a)(1)f]

AA. Reporting

- 1. The information recorded by the permittee pursuant to Condition II.Z.1 of this Section shall be summarized and reported at least annually to the Director. It shall be submitted within 45 days following the end of the reporting period, which is the calendar year unless otherwise specified. [14.2.2] Information submitted pursuant to this condition will be correlated with applicable emissions and other limitations and will be available for public inspection. [14.2.3]
- 2. The permittee shall submit reports of any required monitoring for each semi annual period ending 30 June and 31 December of every calendar year. These reports shall be due to the Office of Air Resources no later than forty-five (45) days after the end of the reporting period. All instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by a

responsible official consistent with condition II.X.4. [29.6.4(b)(1)]

3. Deviations from permit conditions, including those attributable to upset conditions as defined in this permit, shall be reported, in writing, within five (5) business days of the deviation, to the Office of Air Resources. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken. Each report must be certified by a responsible official consistent with Condition II.X.4. of this permit. [29.6.4(b)(2)]

4. The Office shall be notified in writing of any planned physical change or operational change to the emissions units and control devices identified in this permit. Such notification shall include information describing the nature of the change, information describing the effect of the change on the emissions of air contaminants and the scheduled completion date of the planned change. Any change that may result in an increased emission rate of any air contaminant shall be subject to approval of the Office. [Approval Nos. 1581 & 1674(F)(11), Approval Nos. 1492 & 1547(F)(11), Approval Nos. 1586 & 1587(F)(11)]

BB. Credible Evidence

For the purpose of submitting compliance certifications or establishing whether or not the permittee has violated or is in violation of any provision of this permit, the methods used in this permit shall be used, as applicable. However, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether the permittee would have been in compliance with applicable requirements if the appropriate performance or compliance test procedures or methods had been performed. [40 CFR 51.212(c), 51.12(c), 52.33(a)]

CC. Emission Statements

- 1. The permittee shall submit annually an emission statement that includes information for both VOC and NO_x. if facility wide actual emissions are 25 tons per year of either pollutant. Emission statements shall be submitted to the Office of Air Resources within 45 days of the end of the calendar year. The permittee may apply to the Office of Air Resources to be allowed to discontinue submitting annual emission statements if actual emissions at the facility decrease to below 10 tons per year as a result of a permanent process change. [14.3.1] The permittee shall submit an emission statement in a format approved by the Office of Air Resources. The emission statement shall contain the following information: [14.3.2]
 - a. A certification that the information contained in the emission statement is accurate and complete to the best knowledge of the certifying individual.
 - b. The full name, title, signature, date of signature, and telephone number of the certifying individual.

- c. Facility identification information, including the full name, physical location, mailing address, latitude, longitude, and four digit SIC code(s).
- d. Process data pertaining to each process emitting VOC and/or NO_x, including:
 - (1) Annual and typical ozone season daily fuel use,
 - (2) Annual and typical ozone season daily process rate(s), and
 - (3) Process throughput while air pollution control equipment was not in operation.
- e. Operating data pertaining to each process emitting VOC and/or NO_x during the reporting year, including:
 - (1) Percentage annual throughput,
 - (2) Average hours of operation per day during the reporting year and on a typical ozone season day,
 - (3) Average number of days of operation per week during the reporting year and during a typical ozone season week, and
 - (4) Weeks of operation during the reporting year and during the peak ozone season.
- f. Control equipment information, including:
 - (1) Specific primary and secondary control equipment for each process emitting VOC and/or NO_x,
 - (2) Current overall control efficiency for each piece of control equipment (indicated by percent capture and percent destruction or removal), and
 - (3) Control equipment downtime during the reporting year and during the peak ozone season.
- g. Emissions information, including:
 - (1) Actual annual and typical ozone season daily emissions of VOC and NO_x for each process. Emissions should be reported in tons per year and in pounds per day.
 - (2) A description of the emission calculation method and, if applicable, emission factor(s) used, and
 - (3) The calendar year for which emissions are reported.
- h. Any additional information required by the Director to document the facility's emission statements.

DD. Miscellaneous Conditions

1. This permit may be modified, revoked, reopened, reissued or terminated for cause. The filing of a request, by the permittee, for a permit modification, revocation and reissuance or termination or of a notification of planned changes or anticipated noncompliance does not release the permittee from the conditions of this permit. [29.6.8(c)(3)]

- 2. Any application for a permit revision need only submit information related to the proposed change. [29.4.3(c)]
- 3. Terms not otherwise defined in this permit shall have the meaning given to such terms in the referenced regulation.
- 4. Where more than one condition in this permit applies to an emission unit and/or the entire facility, the most stringent condition shall apply.

SECTION III. SPECIAL CONDITIONS

A. Ozone-depleting Substances

This section contains air pollution control requirements that are applicable to this facility, and the United States Environmental Protection Agency enforces these requirements.

- 1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
 - a. All containers containing a class I or class II substance that is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to 40 CFR 82.106.
 - b. The placement of the required warning statement must comply with the requirements of 40 CFR 82.108.
 - c. The form of the label bearing the required warning statement must comply with the requirements of 40 CFR 82.110.
 - d. No person may modify, remove or interfere with the required warning statement except as described in 40 CFR 82.112.
- 2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVAC) in Subpart B:
 - a. Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices of 40 CFR 82.156.
 - b. Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment of 40 CFR 82.158.
 - c. Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.
 - d. Persons disposing of small appliances, MVACs and MVAC-like appliances (as defined in 40 CFR 82.152) must comply with recordkeeping requirements of 40 CFR 82.166.
 - e. Persons owning commercial or industrial process refrigeration equipment

must comply with the leak repair equipment requirements of 40 CFR 82.156.

- f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
- 3. If the permittee manufactures, transforms, imports or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR Part 82, Subpart A, "Production and Consumption Controls".
- 4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, "Servicing of Motor Vehicle Air Conditioners".

The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo or system used on passenger buses using HCFC-22 refrigerant.

5. The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G, "Significant New Alternatives Policy Program".

B. Prevention of Accidental Releases

This section contains air pollution control requirements that are applicable to this facility, and the United States Environmental Protection Agency enforces these requirements.

Your facility is subject to the requirements of the General Duty Clause, under 112(r)(1) of the CAA Amendments of 1990. This clause specifies that owners or operators of stationary sources producing, processing, handling or storing a chemical in any quantity listed in 40 CFR Part 68 or any other extremely hazardous substance have a general duty to identify hazards associated with these substances and to design, operate and maintain a safe facility, in order to prevent releases and to minimize the consequences of accidental releases which may occur.

C. Acid Rain New Unit Exemption

In accordance with Title IV of the Clean Air Act Amendments of 1990, 40 CFR Part 72.7 and Air Pollution Control Regulation No. 29, the Department of Environmental Management exempts Emission Unit Nos. G022, G019, G024 and G023 from the requirements of the Acid Rain program except for the requirements in 40 CFR 72.2 through 72.6, and 72.10 through 72.13. [40 CFR 72.7(b)(1)]

1. Emission Units G022, G019, G024 and G023 shall only serve generators with a total nameplate capacity of 25 Mwe or less and burn fuel with a sulfur content of 0.05 percent or less by weight. If the unit exceeds these conditions, it will no longer be eligible for a New Unit Exemption. [40 CFR 72.7(a)(1)-(3), 40 CFR 72.7(f)(1)(i)]

- 2. Compliance with the requirement that fuel burned during the year have an annual average sulfur content of 0.05 percent by weight or less shall be determined using the procedures under 40 CFR 72.7(d)(3) for all fuels used at any time during the period for which Emission Units G022, G019, G024 and G023 are exempted. [40 CFR 72.7(d)(3)]
- 3. The permittee, and to the extent applicable, the designated representative, shall comply with the requirements of the Acid Rain Program concerning all years for which Emission Units G022, G019, G024 and G023 are not exempted, even if such requirements arise or must be complied with after the exemption takes effect. [40 CFR 72.7(f)(1)(ii)]
- 4. For any period for which an emission unit is exempt under this section, the unit is not an affected unit under the Acid Rain Program and 40 CFR parts 70 and 71 and is not eligible to be an opt-in source under 40 CFR Part 74. As an unaffected unit, each emission unit shall continue to be subject to any other applicable requirements under 40 CFR parts 70 and 71. [40 CFR 72.7(f)(2)]
- 5. The permittee shall retain, at the source, records demonstrating that the requirements of Condition III.C.1 are met. These records shall be retained for a period of 5 years from the date the records are created. These records shall include, for each delivery of fuel, the type of fuel and the sulfur content. The permittee bears the burden of proof that the requirements of Condition III.C.1 are met. [40 CFR 72.7(f)(3)]
- 6. On the earliest of the following dates, Emission Units G022, G019, G024 or G023 shall lose its exemption and become an affected unit under the Acid Rain Program and 40 CFR parts 70 and 71:
 - a. The date on which the unit first serves one or more generators with total nameplate capacity in excess of 25 Mwe;
 - b. January 1 of the year following the year in which the annual average sulfur content for fuel burned at the unit exceeds 0.05% by weight. [40 CFR 72.7(f)(4)(i)]
- 7. Notwithstanding 40 CFR 72.30(b) and (c), the designated representative shall submit a complete Acid Rain permit application no later than 60 days after the first date on which the unit is no longer exempt. [40 CFR 72.7(f)(4)(ii)]

8. For purposes of applying the monitoring requirements under 40 CFR part 75, a unit that loses its exemption shall be treated as a new unit that commenced commercial operation on the first date on which the unit is no longer exempt. [40 CFR 72.7(f)(4)(iii)]

SECTION IV. Attachment A

Compliance Determination Block Island Power Condition I.E.1.a

Emission Unit	Engine HP Rating	Engine KW Rating	Engine Hours (previous 12 months) (1)	Maximum Power Output (kW-hrs) (2)	Actual Power Output (kW-hrs) (previous 12 months) (3)	Load Factor (4)	NO _x Emission Factor (lb/hp-hr) (5)	NO _x Emissions Maximum Load (lbs/hr) (6)	NO _x Emissions (tons) (previous 12 months) (7)
G019	2000	1136					0.024	48.0	
G011	1615	1100					0.024	38.76	
G024	2336	1640					0.00144	3.37	
G022	1961	1360					0.0016	3.10	
G023	1648	1150					0.00144	2.38	
Total									

Notes: 1. Information determined pursuant to Condition I.E.3.b.of this permit

- 2. Maximum Power Output = Engine Hours x Engine kW rating
- 3. Information determined pursuant to Condition I.E.3.c. of this permit
- 4. Load Factor = Actual Power Output/Maximum Power Output
- 5. Emission factors for Emission Units G019 and G011 are based on data in Chapter 3.4 "Large Stationary Diesel and All Stationary Dual-Fuel Engines" Emission factor for Emission Unit G024 is based on manufacturer's data in Appendix B of the permit application for Engine 24 and the SCR system. Emission factor for Emission Unit G022 is based on manufacturer's data in Appendix B of the permit application for Engine 22 and the SCR system. Emission factor for Emission Unit G023 is based on manufacturer's data in Appendix B of the permit application for Engine 23 and the SCR system.
- 6. NO_x Emissions Maximum Load = NO_x Emissions Factor x Engine HP Rating
- 7. NO_x Emissions = NO_x Emissions Maximum Load x Load Factor x Hours Operated